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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,941	12/19/2001	Christian L. Marquez	39-0024	2591

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EXAMINER

STRECKER, GERARD R

ART UNIT	PAPER NUMBER
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2862

DATE MAILED: 11/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/027,941

Applicant(s)

MARQUEZ ET AL.

Examiner

Gerard Strecker

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 5, 6, 9-14, 16 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5, 6, 9-14, 16 and 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Goodfellow et al (4,357,072, of record), hereinafter Goodfellow.

Goodfellow discloses a process for fabricating a photonics package (Figs. 4 and 5) wherein (see columns 3-5) a photo detector 6 is positioned in a housing, the housing being formed by cover 2 and base 4. An optical fiber 10 is inserted through a flange 16 into the housing, the optical fiber having been secured to the flange. Flange 16 is affixed to the housing by a settable sealing material (solder annulus 9) and the position of the flange on the housing is adjusted while affixing the flange to position the optical fiber with respect to the photo detector. See col. 4, lines 3-23. Thus, Goodfellow meets the recited steps even if not in the same sequence.

Claims 14, 16, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falkenstein et al (4,707,066), hereinafter Falkenstein, in view of Goodfellow et al (4,357,072) and Boger et al (6,234,688).

Falkenstein discloses (Figs. 1, 2) a photonics package including: a housing (G, K) including spaced front and back walls; a photosensitive element D mounted in a first plane within the housing; a fiber adjustment window W through said front wall opposite said photosensitive element; a fiber optic assembly including an optical fiber (S/L) and a cylindrical flange T, said flange being laterally adjustable and secured to said front wall to locate said optical fiber in said fiber adjustment window and to align an end portion of said optical fiber with said photosensitive element. As recited in claim 16, the flange T is adjustably secured to the front wall by solder (col. 6, lines 27-38). The fiber optic assembly further includes a ferrule (tube R) coaxial with and

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surrounding the optical fiber, said ferrule being secured (by soldering, col. 6, lines 27-30) to said cylindrical flange to position said optical fiber longitudinally with respect to said photosensitive element. As noted at col. 9, line 17-20, the optical fiber may also be soldered to the ferrule R. The end portion of the optical fiber is located in a second plane perpendicular to said first plane in optical connection with said photosensitive element.

The solder used in Falkenstein to secure the flange to the front wall is not disclosed as being "a settable material to allow alignment of said optical fiber while said material is setting". Nor does the housing of Falkenstein's photonics package have a viewing aperture. In addition, Falkenstein's photosensitive element is not mounted on the back wall of the housing, but rather on a plate P parallel to the back wall.

Goodfellow et al, as discussed above, teaches in a process for fabricating a photonics package, securing the flange through which the photonics package fiber is inserted, by a settable solder material, to allow optimization of the alignment of the optical fiber while the solder material is setting. The photo detector of Goodfellow et al is mounted on the back wall of the housing.

Boger et al discloses (Fig. 3) a photonics package including: a housing including spaced front (30) and back (unnumbered) walls; a photosensitive element 12 mounted within a cavity 14 of the housing; a fiber adjustment window 28 through said front wall opposite said photosensitive element; a fiber optic assembly including an optical fiber 20 surrounded by a ferrule 24 and a cylindrical flange 34 receiving said optical fiber, said flange being laterally adjustable and secured

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to said front wall to locate said optical fiber in said fiber adjustment window and to align an end portion of said optical fiber with said photosensitive element (see col. 3, lines 50-56). The cavity 14, before being sealed by a housing cover, would constitute a viewing aperture in the housing. See col. 2, lines 57-79.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to employ a settable solder in the process of fabricating Falkenstein's photonics package, as taught by Goodfellow et al, to optimize the alignment of the optical fiber with the photosensitive element. In addition, although the photosensitive element of Falkenstein et al is not mounted on the back wall of the housing, mounting of the photosensitive element on the back wall of a photonics package housing is accepted practice in the art, as exemplified by Goodfellow et al, and it would have been obvious to one skilled in the art to mount the photosensitive element of Falkenstein et al in such manner, to conserve housing space, to provide a more compact package, and to provide connector access through the back wall.


Further, it would have been obvious to one skilled in the art to provide Falkenstein's housing with a viewing window, as taught by Boger et al, to aid in aligning the optic fiber with the photosensitive element. Provision of an automated control system (claim 21) for observing the optical connection and aligning the fiber would also have been obvious to one skilled in the art. The courts have held that broadly providing an automatic or mechanical means to replace a manual activity which accomplishes the same result is not sufficient to distinguish over the prior art. See MPEP 2144.04 III.

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Claims 1, 5, 6, 9-13, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falkenstein et al in view of Goodfellow et al, both discussed in the rejection of apparatus claims 14, 16, 20 and 21 above. The steps of process claims 1, 5, 6, 9-13, 18 and 19 would be carried out in the process of fabricating Falkenstein's photonics package as modified in view of Goodfellow et al.

Applicant's arguments with respect to claims 1, 5, 6, 9-14, 16 and 18-21 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication should be directed to G. R. Strecker
telephone number (703) 305-4937.


GERARD R. STRECKER
PRIMARY EXAMINER

G R STRECKER/pj

11/19/03